



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,967	07/10/2001	Hideki Masubuchi	Q65000	4248

7590 06/30/2004

Sughrue Mion Zinn
Macpeak & Seas
2100 Pennsylvania Avenue NW
Washington, DC 20037-3202

EXAMINER

FISCHER, JUSTIN R

ART UNIT PAPER NUMBER

1733

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/869,967

Applicant(s)

MASUBUCHI ET AL.

Examiner

Justin R Fischer

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-19 and 27-31 is/are allowed.
- 6) ☒ Claim(s) 1,2,5,20,22-26 and 32 is/are rejected.
- 7) ☒ Claim(s) 3,4,6-8 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07102001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 22-26 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims contain language that requires "all of the filaments constituting each sheath layer of the core (or sheath) strand have the same diameter, which is larger than a diameter of the filaments constituting a layer located inside the sheath layer". Prior to the amendment of independent claims 1, 5, 9, and 20, it was believed that this language required all the sheath-filaments to have the same diameter; however, it is now unclear if such a construction is intended or if it is only required that all the sheath filaments within a given sheath layer have the same diameter. Furthermore, the language "inside the sheath layer" appears at the end of the passage noted above. Since there is potentially more than one sheath layer, it is unclear which layer is "the sheath layer". Is this language trying to require that the respective sheath layers are formed of progressively larger filaments as you move outward from the core or is it simply requiring that the diameter of the sheath filaments are all the same and greater than the core filaments? Based on the amendments noted above, it appears that the language "all of the filaments constituting each sheath layer of the core (or sheath) strand have the same diameter" requires that only the filaments within a given sheath layer are required to have the same diameter- it does not require

Art Unit: 1733

that all sheath filaments have the same diameter. Applicant is asked to clarify the cord structure as to whether or not all the sheath filaments are required to have the same diameter or if only the sheath filaments within a given sheath layer are required to have the same diameter and furthermore, how the language "the sheath layer" is supposed to limit the relationship of the larger diameter filaments with additional filaments.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikehara (JP 08081889, newly cited). As best depicted in Figures 1-3, Ikehara teaches a steel cord construction formed of a core strand and a plurality of sheath strands, wherein each of said core strand and said sheath strands are formed by twisting a

Art Unit: 1733

plurality of filaments. In particular, the core strand and the sheath strands have the following makeup: a core formed of two filaments and one or more sheath layers made of plural filaments, wherein (a) the filaments within each sheath layer of each sheath strand have the same diameter and (b) the filaments in the outermost sheath layer have a larger diameter than every additional filament (Table 2: Example 4). Ikehara further states that the steel cord construction has uses in a wide variety of rubber applications, including tire belts (Paragraphs 1 and 25- translation obtained from USPTO translator).

5. Claims 1, 2, 5, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Morgan (US 6,272,830, newly cited). Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

As best depicted in Figures 3 and 5, Morgan teaches a steel cord construction formed of a core strand and a plurality of sheath strands, wherein each of said core strand and said sheath strands are formed by twisting a plurality of filaments. In particular, the core strand and the sheath strands have the following makeup: a core formed of three or four filaments and one sheath layer made of plural filaments, wherein (a) the filaments within the sheath layer of each core strand and sheath strand have the same diameter and (b) the filaments in the sheath layer ("outermost sheath layer" since there is only one sheath layer per strand) have a larger diameter than every additional filament. Morgan further states that the steel cord construction can be used as reinforcement in a tire carcass structure (Column 1, Lines 5-20 and Column 5, Lines 30-35).

Allowable Subject Matter

6. Claims 9-19 and 27-31 are allowed. The examiner's statement of reasons for allowance has been previously set forth in the Non-Final Rejection mailed on October 10, 2003 (Paragraph 11).

7. Claims 3, 4, 6-8, and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form to overcome including all of the limitations of the base claim and any intervening claims.

8. Claims 22-26 and 32 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Response to Arguments

9. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection. As correctly argued by applicant, neither Bruyneel nor Amamiya disclose the steel cord construction of the amended claims, particularly a steel cord in which all of the filaments constituting each sheath layer have the same diameter and a diameter of every filament constituting an outermost sheath layer of each sheath strand is larger than a diameter of every filament constituting every layer located inside the outermost layer. The rejections involving these references have been withdrawn. However, Ikehara and Morgan (both newly cited) are directed to such steel cord constructions, as set forth in the rejections above.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Application/Control Number: 09/869,967
Art Unit: 1733

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Justin Fischer

June 24, 2004


JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300